WHAT IS CLAIMED IS:

1 An image correction method, wherein

a first conversion in which digital code values of each pixel of image data representing an image to be corrected are converted to values whose relationship with light intensity values or light intensity logarithm values is linear,

a second conversion in which at least one of the color or density of said image to be corrected which is represented by said image data is corrected after said image data has undergone said first conversion, and

a third conversion in which the values of each pixel of said image data are restored to said digital code values after said image data has undergone said second conversion.

2 An image correction method according to claim 1, wherein said image data is obtained by converting values of the light intensity or values related to the light intensity of each component color of each pixel of said image to be corrected to digital code values A, B, C in accordance with predetermined conversion conditions, and wherein, when A', B', C' are values having a linear relationship with the light intensity values, at least one of said first conversion

or said third conversion is performed in accordance with the relational formula

$A = e\ (a \cdot A')$ $B = e\ (a \cdot B')$ $C = e\ (a \cdot C')$

when the digital code values A, B, C are not greater than a predetermined value f, and in accordance with the relational formula

$A = e\ (b \cdot A'^{c} - d)$ $B = e\ (b \cdot B'^{c} - d)$ $C = e\ (c \cdot C'^{c} - d)$

when the digital code values A, B, C are greater than a predetermined value f, when a, b, c, d, e, f are constants.

3 An image correction method according to claim 1, wherein said second conversion is an affine transformation.

4 An image correction device comprising:

first conversion means for performing a first conversion in which digital signal values of each pixel of image data representing an image to be corrected are converted to values whose relationship with light intensity values or light intensity logarithm values is linear;

second conversion means for performing a second conversion in which at least one of the color or density of said image to be corrected which is represented by said image data is corrected after said image data has

undergone said first conversion; and

third conversion means for performing a third conversion in which the values of each pixel of said image data are restored to said digital signal values after said image data has undergone said second conversion.

SUB A9

5 A recording medium on which is recorded a program for executing on a computer a process including:

a first step for carrying out a first conversion in which digital signal values for each pixel of image data representing an image to be corrected are each converted to values whose relationship with the light intensity values or the light intensity logarithm values is linear;

a second step for carrying out a second conversion in which at least one of the color or density of said image to be corrected which is represented by said image data is corrected; and

a third step for carrying out a third conversion in which the values of each pixel of image data which has undergone said second conversion are restored to said digital signal values.

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